REMARKS

This is a full and timely response to the outstanding final Office Action mailed October 19, 2005. Claims 1, 3-5, 7-9, and 11-13 remain pending in the present application. Claims 1 and 7 have been amended herein.

In the Office Action, pending claims 1, 3, 4, 7-9, 11, and 12 have been preliminarily rejected as allegedly being anticipated under 35 U.S.C. § 102(b). In addition, pending claim 5 has been preliminarily rejected as allegedly being unpatentable under 35 U.S.C. § 103(a). Claim 6 has been objected to as being dependent upon a rejected base claim. The Applicant respectfully traverses all of the rejections of the Office Action. Reconsideration and allowance of the subject application and presently pending claims 1, 3-5, 7-9, and 11-13 is respectfully requested.

EXAMINER INTERVIEW

The Applicant thanks the Examiner for the time spent during a recent Examiner interview on January 23, 2006 where an agreement to requirements for patentability seemed to be obtained. During the Interview, the Applicant's Attorney expressed that bv and ai of claim 1, in the presently pending patent application, are not the same as eo and es in Noro. In response, the Examiner expressed that an argument should be provided by the Applicant showing how bv and ai in claim 1 of the presently pending patent application are not the same as eo and es in Noro. The following discussion of presently pending claim 1 explains in detail how bv and ai in claim 1 of the presently pending patent application is not the same as eo and es in Noro.

A. CLAIM 1

In the Office Action claim 1 has been preliminarily rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Noro (US 4,969,195). The Office Action reads:

> Regarding claim 1, Noro discloses a thermal overload and resonant motion control circuit (col.3, lines 55-68) for an audio speaker (3 in Fig. 1) driven by a drive signal from an amplifier (11), where the audio speaker is driven by a drive signal (output from 11) from an amplifier (11), the circuit including: a feedback signal generating (fsg) circuit for generating a feedback signal (from 51 in Fig. 4), said feedback signal being an absolute difference (Fig. 4 shows the absolute difference between the absolute e0 and the absolute es) between a proportion of a drive voltage and a proportion of a drive current (in Fig. 4, element 51 generated the difference); and an attenuator (52, 6, 13) operable in response to said feedback signal (from 51) for controlling said drive signal (output from 11), wherein said feedback signal (from 51) is given by f(ai,bv), where i and v are drive currents (the drive current is detected by Zs because the drive current is equal to the voltage divided by the resistance Zs; col. 2, lines 42-43) and drive voltage (the drive voltage is the voltage at the input of 4) respectively for said drive signal (output from 11), and where a and b (although a and b are not explicitly discussed, they are inherently included. "es" is a function of i and "eo" is a function of v) are percentages of i and v respectively utilized by said fsg circuit and wherein said attenuator (52, 6, 13) includes a converter (52) which receives said feedback signal and generates a DC output which is a selected function of the received feedback signal (col. 5, lines 8-20), and a variable attenuator component (6, 13) through which one of the input and output of said amplifier is applied, said DC output (from 52) being applied to control (as shown in Fig. 6) the level of said variable attenuator component (6,13) wherein said drive signal (from 11) is related to motion of said driver (the motion of the driver affects the impedance; col. 1, lines 16-40; as discussed on co.2, lines 67-68, the impedance alters the drive current) and said drive current (as discussed on col. 2, lines 40-43, the feedback control is determined by the sensed drive current through Rs).

For a proper rejection of a claim under 35 USC§102(b), the cited reference must disclose all elements/features/steps of the claim. See, e.g., E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co., 849 F.2d 1430, 7 USPQ2d 1129 (Fed. Cir. 1988).

Independent claim 1 reads:

> 1. A thermal overload and resonant motion control circuit for an audio speaker having a driver, where the audio speaker is driven by a drive signal from an amplifier, the circuit including:
>
> a feedback signal generating (fsg) circuit for generating a feedback signal, ***said feedback signal being an absolute difference between a proportion of a drive voltage and a proportion of a drive current***; and
>
> an attenuator operable in response to said feedback signal for controlling said drive signal, wherein ***said feedback signal is given by f(ai, bv), where i and v are drive currents and drive voltage respectively for said drive signal, and where a and b are percentages of i and v respectively utilized by said fsg circuit*** and wherein said attenuator includes a converter which receives said feedback signal and generates a DC output which is a selected function of the received feedback signal, and a variable attenuator component through which one of the input and output of said amplifier is applied, said DC output being applied to control the level of said variable attenuator component, wherein said drive signal is related to motion of said driver and said drive current.
>
> (***Emphasis Added***)

The Applicant respectfully submits that Noro fails to disclose at least the above-emphasized elements of claim 1. Noro provides for impedance correction by using a separate equivalent impedance means. The equivalent impedance means equivalently forms an **ideal impedance state of a speaker**. The output of the equivalent impedance means (eo) is supplied to a comparison means. The comparison means compares the output signal from the equivalent impedance means with a voltage detected by a detection element, and supplies a comparison result to a feedback gain control circuit. The feedback gain control circuit controls a feedback gain of the feedback path to an amplifier on the basis of the comparison result by the comparison means (col.3, line 40-51). As mentioned above, the output of the equivalent impedance means is eo.

During the Examiner Interview, the Examiner expressed that it was believed that eo and ei of Noro were the same as ai and bv of the presently pending patent application and claim 1. As is explained above, eo in Noro is an output of a separate equivalent impedance means. The separate equivalent impedance means equivalently forms **an ideal impedance state** of a speaker. For at least this reason, the Applicant respectfully submits that the presently pending application and claim 1 does not contain a separate equivalent impedance means. In addition, the presently pending application does not provide for sensing of a difference between a current of a model (*i.e.*, the separate equivalent impedance means) and the current of an actual speaker. As a result, eo, the output of the separate equivalent impedance means, is not the same as either ai or bv.

Alternatively, claim 1 provides for an attenuator operable in response to a feedback signal, where the feedback signal is an absolute difference between a proportion of a drive voltage and a proportion of a drive current, for controlling the drive signal. The feedback signal is claimed as being given by f(ai,bv), where i and v are drive current and voltage respectively for the drive signal, and where a and b are percentages of i and v respectively utilized by the feedback signal generating circuit. Unlike Noro, there is no ideal impedance state of a speaker provided or used for comparison.

Due to at least the abovementioned, Noro does not disclose a feedback signal given by f(ai, bv), where i and v are drive current and drive voltage respectively for the drive signal, and where a and b are percentages of i and v respectively utilized by the feedback signal generating circuit. Since Noro does not disclose all elements of claim 1, the Applicant respectfully submits that claim 1 is allowable and allowance of claim 1 is respectfully requested.

B. CLAIMS 3-9, 11, and 12

The Applicant respectfully submits that since claims 3-9, 11, and 12 depend on independent claim 1, claims 3-9, 11, and 12 contain all limitations of independent claim 1. Since independent claim 1 should be allowed, as argued above, pending dependent claims 3-9, 11, and 12 should be allowed as a matter of law for at least this reason. In re Fine, 5 U.S.P.Q. 2d 1596, 1608 (Fed. Cir. 1988). This also addresses rejection of claim 5 under obviousness.

C. CLAIM OBJECTION

In the Office Action, claim 6 has been objected to as being dependent upon a rejected base claim, but being allowable if rewritten in independent form including all of the limitation of the base claim and any intervening claims. The Applicant has placed dependent claim 6 in independent form as claim 13.

CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, Applicant respectfully submits that all objections and rejections have been traversed, rendered moot and/or accommodated, and that presently pending claims 1, 3-5, 7-9, and 11-13 are in condition for allowance. Favorable reconsideration and allowance of the present application and the presently pending claims are hereby courteously requested. If in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (603) 627-8134.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail in an envelope addressed to: Mail Stop AMENDMENT, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on February 21, 2006 at Manchester, New Hampshire.

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